

## Sensor/Actuator cable - SAC-4P-MS/ 0,3-186/FS SCO - 1555680

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Sensor/Actuator cable, 4-position, PUR, black-gray RAL 7021, Plug straight M12 SPEEDCON, A-coded, on Socket straight M12 SPEEDCON, A-coded, Cable length: 0.3 m

### Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Save time, thanks to installation with SPEEDCON fast locking system
- ✓ High-performance: connectors and cables with a large conductor cross section for power supply



### Key Commercial Data

|                                      |          |
|--------------------------------------|----------|
| Packing unit                         | 1 pc     |
| Weight per Piece (excluding packing) | 40.0 g   |
| Custom tariff number                 | 85444290 |
| Country of origin                    | Poland   |

### Technical data

#### Dimensions

|                 |       |
|-----------------|-------|
| Length of cable | 0.3 m |
|-----------------|-------|

#### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| Degree of protection            | IP65                             |
|                                 | IP67                             |

#### General

|                       |          |
|-----------------------|----------|
| Rated current at 40°C | 4 A      |
| Rated voltage         | 250 V    |
| Number of positions   | 4        |
| Insulation resistance | ≥ 100 MΩ |

## Sensor/Actuator cable - SAC-4P-MS/ 0,3-186/FS SCO - 1555680

### Technical data

#### General

|                              |              |
|------------------------------|--------------|
| Coding                       | A - standard |
| Status display               | No           |
| Protective circuit/component | Unwired      |
| Overvoltage category         | II           |
| Pollution degree             | 3            |
| Insertion/withdrawal cycles  | ≥ 100        |

#### Material

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| Flammability rating according to UL 94 | HB                                          |
| Contact material                       | CuSn                                        |
| Contact surface material               | Ni/Au                                       |
| Contact carrier material               | TPU GF                                      |
| Material of grip body                  | TPU, hardly inflammable, self-extinguishing |
| Material, knurls                       | Zinc die-cast, nickel-plated                |
| Sealing material                       | NBR                                         |

#### Standards and Regulations

|                                        |    |
|----------------------------------------|----|
| Flammability rating according to UL 94 | HB |
|----------------------------------------|----|

#### Cable

|                                               |                                      |
|-----------------------------------------------|--------------------------------------|
| Cable type                                    | PUR POWER 0.75 mm <sup>2</sup> black |
| Cable type (abbreviation)                     | 186                                  |
| Cable abbreviation                            | LiY11Y                               |
| UL AWM style                                  | 20549 / 1061 (80°C/300 V)            |
| Conductor cross section                       | 4x 0.75 mm <sup>2</sup> (power line) |
| AWG signal line                               | 18                                   |
| Conductor structure signal line               | 42x 0.15 mm                          |
| Core diameter including insulation            | 1.75 mm ±0.05 mm                     |
| Thickness, insulation                         | ≥ 0.23 mm (Core insulation)          |
|                                               | ≥ 0.76 mm (Outer cable sheath)       |
| Wire colors                                   | brown, white, blue, black            |
| Overall twist                                 | 4 wires, twisted                     |
| External sheath, color                        | black-gray RAL 7021                  |
| External cable diameter D                     | 5.9 mm ±0.15 mm                      |
| Smallest bending radius, movable installation | 59 mm                                |
| Minimum bending radius, fixed installation    | 5 x D                                |
| Minimum bending radius, flexible installation | 10 x D                               |
| Number of bending cycles                      | 2000000                              |
| Bending radius                                | 59 mm                                |

## Sensor/Actuator cable - SAC-4P-MS/ 0,3-186/FS SCO - 1555680

### Technical data

#### Cable

|                                 |                                                |
|---------------------------------|------------------------------------------------|
| Traversing path                 | 5 m                                            |
| Traversing rate                 | 3 m/s                                          |
| Acceleration                    | 5 m/s <sup>2</sup>                             |
| Cable weight                    | 57 kg/km                                       |
| Outer sheath, material          | PUR                                            |
| Material conductor insulation   | PVC                                            |
| Conductor material              | Bare Cu litz wires                             |
| Insulation resistance           | ≥ 1 MΩ*km (at 20 °C)                           |
| Conductor resistance            | max. 26 Ω/km (at 20 °C)                        |
| Nominal voltage, cable          | ≤ 300 V                                        |
| Test voltage, cable             | ≥ 3000 V                                       |
| Flame resistance                | according to UL 758/1581 (horizontal)          |
|                                 | in accordance with UL 758/1581 FT2             |
| Resistance to oil               | According to DIN EN 60811-2-1, 168 h at 100°C  |
| Other resistance                | hydrolysis and microbe resistant               |
|                                 | Low adhesion                                   |
|                                 | abrasion-resistant                             |
|                                 | Resistant to salt water                        |
| Ambient temperature (operation) | -25 °C ... 80 °C (cable, fixed installation)   |
|                                 | -5 °C ... 80 °C (cable, flexible installation) |

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27060306 |
| eCl@ss 4.1 | 27060306 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |
| eCl@ss 8.0 | 27279218 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000830 |
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

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### Classifications

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 31251501 |

### Approvals

#### Approvals

##### Approvals

UL Listed / cUL Listed / EAC / cULus Listed

##### Ex Approvals

##### Approvals submitted

### Approval details

|                                                                                               |       |
|-----------------------------------------------------------------------------------------------|-------|
| UL Listed  |       |
| Nominal current I <sub>N</sub>                                                                | 4 A   |
| Nominal voltage U <sub>N</sub>                                                                | 300 V |

|                                                                                                |       |
|------------------------------------------------------------------------------------------------|-------|
| cUL Listed  |       |
| Nominal current I <sub>N</sub>                                                                 | 4 A   |
| Nominal voltage U <sub>N</sub>                                                                 | 300 V |

|     |
|-----|
| EAC |
|-----|

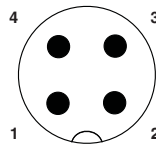
# Sensor/Actuator cable - SAC-4P-MS/ 0,3-186/FS SCO - 1555680

## Approvals

cULus Listed 

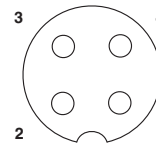
## Drawings

Schematic diagram



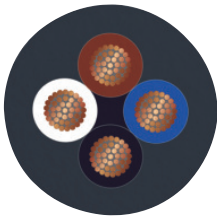
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Schematic diagram



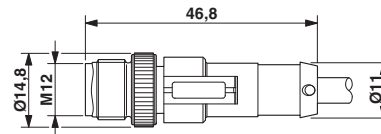
Pin assignment M12 socket, 4-pos., A-coded, view female side

Cable cross section



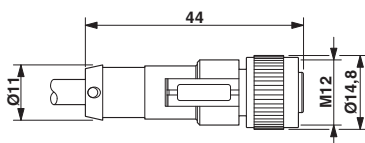
PUR POWER 0.75 mm² black [186]

Dimensional drawing



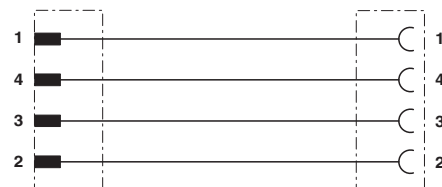
M12 SPEEDCON plug, straight

Dimensional drawing



M12-SPEEDCON socket, straight

Circuit diagram



Contact assignment of the M12 plug and the M12 socket